

mixing hollow fibers, absorbent, and binder fibers;
depositing said mixture onto a moving conveyor belt;
heating said deposited mixture to a temperature sufficient to melt said binder fibers; and
cooling said web thereby forming a structurally rigid web;
wherein said absorbent further comprises wood fluff pulp; and
wherein said binder fibers further comprise bicomponent fibers.

16. (Withdrawn) The process of claim 15, wherein said hollow fiber comprises from about 10 to about 50 percent by weight of said web.

17. (Withdrawn) The process of claim 15, wherein said binder fibers comprise from about 3 to about 15 percent by weight of said web.

18. (Withdrawn) The process of claim 15, wherein said absorbent comprises from about 60 percent to about 80 percent of the weight of said web.

19. (Withdrawn) A process of making a rigid single layer air-laid web comprising:

mixing hollow fibers and absorbent fibers;
depositing said mixture onto a surface thereby creating a loose web;
bonding said loose web thereby creating a rigid unitary web.

20. (Withdrawn) The process of claim 19, wherein said hollow fibers comprise from about 10 to about 50 percent by weight of said web.

REMARKS

This Amendment and Response is being submitted in response to the Non-Final Office Action mailed March 23, 2006. Claims 1-14 are pending in the Application. Claims 15-20 have been withdrawn. Claims 1-14 stand rejected under 35 U.S.C. 103(a)

as being unpatentable over Kwok (U.S. Pat. No. 5,023,131) in view of Huard et al. (U.S. Pat. No. 6,517,848) or Weisman et al. (U.S. Pat. No. 4,610,678) and Dean et al. (U.S. Pat. No. 6,321,976). Claims 1-14 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (H1732) in view of Barge et al. (U.S. Pat. No. 5,989,688), Seal (U.S. Pat. No. 5,041,104), and optionally further in view of JP 1-260051A.

In response to these rejections, Applicants offer the following remarks and amendments. These are fully supported in the specification, drawings, and claims of the Application and no new matter has been added. Based upon the following, reconsideration of the Application and withdrawal of the rejections are respectfully requested.

Rejection of Claims 1-14 Under 35 U.S.C. 103(a) –
Kwok '131 in view of Huard '848, Weisman '678 and Dean '976:

Claims 1-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kwok (U.S. Pat. No. 5,023,131) in view of Huard et al. (U.S. Pat. No. 6,517,848) or Weisman et al. (U.S. Pat. No. 4,610,678) and Dean et al. (U.S. Pat. No. 6,321,976).

The Applicants submit that Kwok is not concerned with the same field of endeavor as the current invention. Kwok discloses batts that are “useful for fiberfill, insulation, padding, resilient cushioning, and the like.” The Applicants’ current invention is instead concerned with a “composition useful as an absorbent core in diapers, incontinent pads, sanitary napkins, and other absorbent pads needed for bodily fluids.”

“In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically

would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992).

Kwok is not in the field of the Applicant's endeavor. As defined in the abstract, and in claim 1, the Applicant's field of endeavor is a "single layer air-laid absorbent pad" for use in "diapers, absorbent pads, sanitary napkins, and other absorbent pads needed for bodily fluids." Thus, the current invention is not concerned with the fiberfill of Kwok, which is used for insulation, padding, and resilient cushioning.

The Kwok reference is not reasonably pertinent to the particular problem with which the inventor was concerned. The problem that the inventor is concerned with is the rapid absorption and containment of insulting body fluids. Batts "useful for fiberfill, insulation, padding, resilient cushioning, and the like" are not reasonably pertinent. No one of ordinary skill in the art would utilize fiberfill as an absorbent for body fluids.

The Examiner states that the "cotton fibers are taken to be the recited absorbent material." However, there is no disclosure of this feature in the Kwok reference. Fiberfill products utilize cotton as an inexpensive, durable fiber. It is not for any absorbency characteristics of the cotton. While the Examiner notes that a reference cited by Kwok discloses an absorbent pad, that alone does not render Kwok an appropriate reference for such pads. References are cited in patents for a variety of reasons and physical properties. Any of these could be relevant to Kwok's patentability. However, without Kwok itself disclosing its use as an absorbent pad, which it does not do, simply disclosing an absorbent pad in the background section does not make Kwok analogous prior art. For example, The Examiner states that the cotton fibers are absorbent but there is no basis for this conclusion. One use specifically mentioned by Kwok is "insulation". It is well known that if cotton gets wet, it has no insulation properties. Thus trying to convert Kwok's fiberfill into an absorbent pad is clearly teaching away from the purposes of Kwok. It does not make Kwok "reasonably pertinent to the particular problem with which the inventor is concerned."

The Kwok reference, because of the matter with which it deals, i.e., fiberfill and insulation, would not have logically commended itself to the applicant's attention in considering the problem of fluid absorption and retention. No inventor of ordinary skill in the art would substitute a furniture cushion or pillow as a absorbing pad for diapers and other sanitary items.

Typical of fiberfill products, Kwok contains a greater amount of binder fiber than do webs used in diapers and other personal sanitary products. This is largely due to their different uses, and the properties that each of those uses needs. Batts "useful for fiberfill, insulation, padding, resilient cushioning, and the like," such as that disclosed by Kwok, are needed to retain their resiliency and interlocked web formation through multiple launderings and physical uses. To accomplish this, Kwok and similar references include a large amount of binder fibers to rigidly interlock the various fibers. This is a common approach when making fiberfill products. When subjected to heat, the higher percentage of binder in the web coats the cotton fibers more completely, locking the fibers into position. The fibers remain resiliently rigid, however the increased binder can coat the cotton fibers themselves. This clearly causes the cotton fibers to be incapable of absorbing an insulting liquid, and renders the web incapable of use as an absorbent.

While the increase in binder fiber provides an extremely resilient batt composition, the "hand" of these batts is extremely abrasive, and unsuitable in a diaper/absorbent padding applications. Padding used for diapers does not have to withstand the repeated usage and washings that fiberfill batts do. However, because webs used for diapers and other absorbent articles are often used in close proximity to the body, they must have a much softer "hand" than the fiberfill batts. Batt having a hard hand are irritable to the user. By including less binder fiber, the Applicant can improve the hand of the invented webs, and still retain the requisite batt integrity for use as an absorbent pad. However, this decrease in binder fiber would preclude use as fiberfill, since the invented web would likely disintegrate after only a few launderings.

Kwok is not in the field of applicant's endeavor, nor is it reasonably pertinent to the particular problem with which the inventor was concerned. Furthermore, "related prior art" does not mean that Kwok teaches the cotton is for absorbent purposes. There is no reason when an absorbent material is needed in a fiberfill. There is no reason to combine the references.

Kwok discloses a blend of cotton and polyester copolymer binder fibers, and batts made from such blends. The blend includes 75-85 wt. % cotton, and 15-25 wt. % polyester binder fibers. Optionally, other fibers such as "hollow or solid and inorganic or organic, whether natural or synthetic"¹ can be included in the batts, in amounts from 01. to 20 wt. % of the blend.²

Kwok states that, "blends made from less than 15 percent copolyester binder fibers cannot be bonded for adequate durability at any conditions."³ Kwok actually teaches away from the Applicants' claimed range of binder fibers. In contrast to Kwok's disclosure, the Applicants have found that using binder fibers in the range of from about 3 to about 15 wt. % results in a web with excellent binding properties and durability for use in absorbent pads.

None of Huard '848, Weisman '678, or Dean '976 discloses the deficiencies of Kwok.

The Applicants have amended Claim 1, so as to incorporate the claimed range of binder fibers, as previously defined in Claim 6. Claim 1 has also been amended so as to incorporate the claimed range of hollow synthetic fibers of claim 2, and the claimed range of absorbent of claim 9. In light of the amendments to the claims, and the comments presented, the Applicants respectfully submit that the combination of cited

¹ US Pat No 5023131, Col. 2, lines 57-58.

² Id., at Col. 2, lines 62-65.

³ Id., at Col. 3, lines 3-6.

references no longer obviates the Applicants' invention as defined by the Claims. Withdrawal of the rejection is therefore respectfully requested.

Rejection of Claims 1-14 Under 35 U.S.C. 103(a) –
Johnson H1732 in view of Barge '688, Seal '104, and JP '051A:

Claims 1-14 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (H1732) in view of Barge et al. (U.S. Pat. No. 5,989,688), Seal (U.S. Pat. No. 5,041,104), and optionally further in view of JP 1-260051A.

The Examiner states that with respect to Claims 2-14, they "would have been obvious in the art for essentially the same line of reasoning set forth in the immediately preceding numbered paragraph." However, the Examiner does not cite any documentation from the applied references that would render the claims obvious. Through the Applicants' own reading, the Applicants were unable to find anything in the cited references that would render Claims 2-14 of the current application obvious. The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. See *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 USPQ 213 (CCPA 1971); *In re Tiffin*, 443 F.2d 394, 170 USPQ 88 (CCPA 1971), *amended*, 448 F.2d 791, 171 USPQ 294 (CCPA 1971); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). Such a rejection by the Examiner cannot withstand scrutiny under the *Graham v. John Deere* obviousness standards. It is not the Applicant's responsibility to make the Examiner's determination of obviousness for him.

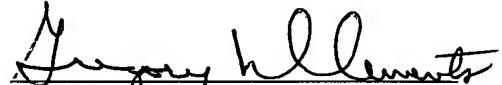
The Applicants have amended Claim 1, so as to incorporate the claimed range of binder fibers, as previously defined in Claim 6. As stated above, the Applicants have found nothing in the cited references that would render Claim 6 obvious. In light of the amendments to the claims, and the comments presented, the Applicants respectfully submit that the combination of cited references no longer obviates the Applicants' invention as defined by the Claims. Withdrawal of the rejection is therefore respectfully requested.

CONCLUSION

In light of the comments presented herewith, the Applicants submit that the current claims are not obvious, and allowance is therefore appropriate. Should the Examiner determine that any further action is necessary to place the Application in condition for allowance, the Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, the Examiner is encouraged to notify undersigned Counsel at the Examiner's earliest convenience.

Respectfully submitted,

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